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AB

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/051,094      | 01/22/2002  | Yoshihisa Yonezawa   | YONE3008/EM         | - 3465 -         |

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|                 |              |
|-----------------|--------------|
| EXAMINER        |              |
| HARPER, HOLLY R |              |
| ART UNIT        | PAPER NUMBER |

2879

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                             |                  |
|------------------------------|-----------------------------|------------------|
| <b>Office Action Summary</b> | Application No.             | Applicant(s)     |
|                              | 10/051,094                  | YONEZAWA ET AL.  |
|                              | Examiner<br>Holly R. Harper | Art Unit<br>2879 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 and 19 is/are rejected.
- 7) Claim(s) 6-18 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election with traverse of Group I in Paper No. 4 is acknowledged.

The Applicant states that there is insufficient grounds to establish patentably distinct inventions. This is not found persuasive. A component is defined as an essential element. It is believed that a separate chamber for the getter material is not considered an essential component and does not have to be mounted on one of the substrates. Therefore, it is an alternate and materially different process. The application discloses in Figure 20B a separate vessel, not a component, for the getter.

The Applicant traverses the position that sufficient burden exists in prosecution of Groups I and II together. This is not found persuasive. The Examiner's reasons for establishing burden are that a separate search would be required for both groups. This is evident in the fact that the groups have obtained separate classification in the art. This statement properly satisfies the criteria for establishing undue burden in accordance with M.P.E.P. 808.02(A), therefore, Applicant's traversal of the restriction requirement is not found persuasive.

Claims 20-24 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

The requirement is still deemed proper and is therefore made FINAL.

***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Electron tube with a ring-less getter.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

*fw  
8/11/03*

*and 19*

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho et al. (UPSN 5,977,706).

In regard to claim 1, the Cho reference discloses an electron tube having a ring-less getter of a tablet shape in a vessel (Figure 7a, Element 74). The getter is activated by light (Column 5, Lines 5-9).

In regard to claim 2, the Cho reference discloses that the getter is an evaporation type and is deposited as a film in the tube (Column 2, Lines 11-13). The getter is activated by light (Column 5, Lines 5-9).

In regard to claim 3, the Cho reference discloses that the getter is a non-evaporable type (Column 5, Lines 37-42). The getter is activated by light (Column 5, Lines 5-9).

4. In regard to claim 19, the Cho reference discloses display device with a phosphor layer (Figure 7a, Element 42).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 ~~and 19~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallace et al. (USPN 5,689,151) in view of Cho et al. (USPN 5,977,706).

In regard to claim 1, the Wallace reference discloses an electron tube with a ring-less getter of a tablet shape in a vessel (Figure 1, Element 29). The getter is activated by drying, a form of irradiation (Column 2, Lines 39-43). The Wallace reference does not specifically disclose that the getter is activated by light, but Cho teaches that light energy is used to irradiate getter materials (Column 5, Lines 4-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to dry the getter by using a type of light energy, as taught by Cho.

In regard to claim 2, the Wallace reference discloses that conventional getters include evaporable getters (Column 4, Line 65-Column 5, Line 3). It is an inherent property of evaporable getters that they will form a getter film.

In regard to claim 3, the Wallace reference discloses that conventional getters include non-evaporable getters (Column 4, Line 65-Column 5, Line 3).

In regard to claim 4, the Wallace reference discloses that the getter is installed on a substrate (Figure 1, Element 29 and 26). The getter is activated by drying, a form of irradiation (Column 2, Lines 39-43).

In regard to claim 5, the Wallace reference discloses that the getter is installed on a component (the insulating layer) of the electron tube (Figure 1, Element 29).

In regard to claim 19, the Wallace reference discloses display device with a luminescent layer (Column 4, Lines 20-22).

***Allowable Subject Matter***

7. Claims 6-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 6, and specifically an electron tube having a ring-less getter mounted on a metallic layer with a metallic wire hanged to the ring-less getter and the two end portions of the wire being attached to the metallic layer.

Regarding claim 7, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 7, and specifically an electron tube having two end portions of a metallic wire being installed on a ring-less getter and attached to a metallic layer.

Regarding claims 8-10, claims 8 -10 are allowable for the reasons given in claim 7 because of their dependency status from claim 7.

Regarding claims 11-13 the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 11-13, and specifically an electron tube having a ring-less getter including a getter material layer and a metallic layer attached to a second metallic layer.

Regarding claim 14, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 14, and specifically comprising an electron tube having a ring-less getter including a getter material layer and a metallic wire being attached to a metallic layer.

Regarding claim 15, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 15, and specifically comprising an electron tube having a ring-less getter including a metallic layer and a getter material film and a metallic wire attached to the metallic layer.

Regarding claims 16, 17, and 18, claims 16, 17, and 18 are allowable for the reasons given in claim 15 because of their dependency status from claim 15.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Watkins et al. (USPN 6,127,777) discloses a getter tablet on a metal plate.

Oguro et al. (USPN 4,733,124) discloses a getter tablet on a metal plate.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (703) 305-7908. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

1/2

Holly Harper  
Patent Examiner  
Art Unit 2879

Joseph Williams  
Joseph Williams